

Executive Summary

Background

The City of Seattle Department of Information Technology (DoIT) contracted with a consultant team (Applied Inference, Pacific Market Research and Andrew Gordon of the UW) to assess the current level of information technology access and literacy among Seattle's residents, explore residents' perceptions about information technology and assist in assessing community needs and interests for use in the cable franchise renewal process. City staff from DoIT and the Citizens Telecommunications and Technology Advisory Board (CTTAB) developed a set of indicators to measure a broad range of impacts that information technology is having on Seattle residents. This survey is intended to update and, when possible, to compare with a similar survey conducted in 2000.

Methods

City of Seattle staff and consultants developed a 19-minute telephone survey that was administered to 1000 random Seattle residents. Certain ZIP codes were sampled more heavily to increase the percentage of respondents from ethnic minorities to reflect Seattle's demographics. Cell phone only households and non-English speakers were not surveyed. Statistical weights were developed for the final sample to balance ZIP code, ethnicity, age and income according to Seattle values reported in the 2000 U.S. Census. Statistical comparisons were made using unweighted data while accounting for subgroup imbalance by including age, gender, income, education, ethnicity and when possible, year of survey in each analysis. In-depth analysis was conducted for subgroups, though small sample sizes limited analysis of some ethnic subpopulations.

Key Findings

Overall, Seattleites are technologically savvy – 83% of Seattleites use the Internet somewhere and 83% have a computer at home. Seventy percent of households have cell phones and nearly two-thirds subscribe to cable television.

Computer access and literacy

The level of home computer access has grown about 10% from 2000. In lower income homes, the increase in home access is about 40%. Although, broadband Internet services adoption has tripled since 2000 (from 18% to 55%), Seattle still has a significant digital divide. The top two reasons for not having a computer at home are cost and lack of interest. Older Seattleites or those with less income or education are less likely to be current or comfortable technology users. Lower levels of connectivity and comfort with technology are also evident among African American respondents – African Americans were about one-third less likely than respondents of other ethnicities to have home Internet access – but the gap is not as pervasive as with seniors and those with less income or education. Residents with disabilities were also much less likely to have computer access at home (58% vs. 83%).

Comparisons with responses given in 2000 indicate that overall, Seattle residents' technology use and literacy is growing. The responses further suggest that Seattle's digital divide is closing for some groups – the greatest gains in home computer and Internet access were in the lowest

income households – but access and literacy are not yet equal across all of Seattle’s communities. Of the dimensions of the digital divide examined here, the age divide seems the most consistent, pervasive and unchanging.

More education and younger age seem to offset the negative effects of low income on access to technology. Further, the younger respondents seem to lead the way in adopting new technologies and expressing interest in technology coming to the market that is not yet widely available, indicating that Seattleites are likely to continue to demand access to cutting edge technology into the future.

People with more education and more income use a computer for more activities. The most popular activity is keeping in touch with family and friends (92%), followed by researching prices and products (85%), purchases (82%) and getting news (81%). Just under three-quarters (71%) use the computer for education and almost 7 in 10 use it to find health or medical information. About half use it for social services or legal information and assistance.

People also have an interest in contributing content. More than a third contribute to a website, bulletin board or online group, one of the two activities that were similar across demographic groups. The other was finding social services. Demographic differences based on age or income emerged for many other activities, with more use associated with more income and younger respondents. Some surprising demographic differences emerged that suggest access or awareness gaps. For example, seniors are less likely to use computers for keeping in touch with friends and family, sharing photos, seeking information about leisure interests or about health or medical information.

Most people are “satisfied” or better with the content of the Internet for their needs (85%), with just under half (48%) being “very satisfied.” Seattleites are quite concerned about viruses and SPAM (unsolicited advertisements sent over the Internet), and confidence in the security of financial transactions is moderate with only 15% saying they are “very confident.” Concern about the security of online financial transaction follows the fault lines of the digital divide reported above – those with less education, less income, seniors and African American respondents are least confident in the security and privacy of their online financial transactions. This suggests that the transition to electronic payment for government transactions will also be most challenging for these groups.

People are generally, but not overwhelmingly satisfied with customer service from their ISP’s. Broadband users feel their Internet rates are too high.

Cable

Nearly two-thirds (65%) of Seattleites subscribe to cable TV. The subscription rate is about the same across subgroups, except it is higher among seniors and lower among younger respondents. Overall, cable subscribers are satisfied with their cable service, but most have had at least one problem with it and those who have are less satisfied with customer service. Cost of cable service is an issue for subscribers (two thirds find it too expensive) and non-subscribers alike (37% say they don’t subscribe because of the cost).

Four out of five respondents – subscribers and non-subscribers alike – said they would be somewhat or very likely to subscribe to at least one new service that requires higher bandwidth, should it become available. Younger respondents – the group least likely to be current cable subscribers – led the interest for several of these services.

This survey uncovered some outreach opportunities for the City. About one-fourth of the respondents, subscribers and non-subscribers alike, are aware of the City's Cable Office and 20% said they wanted to be contacted by the City regarding their rights as a cable subscriber and discounts for low income seniors and people with disabilities. This information was provided to the Cable Office for follow-up.

About half of the respondents have watched SCAN, Seattle's public access channel, and about 80% think it is important or very important for individuals and organizations to have the opportunity to create and show their own television programs. Those who have seen SCAN give it a higher importance rating, but 78% of those who haven't watched it also rate it as important or very important.

Accessing city services

The City's website and TV channel have both seen significant growth in use since 2000. Use of the City's web site has gone up by half (from 33% to 49%). About half (56%) of 2004's respondents have seen the Seattle Channel. Among cable subscribers, 69% have seen it, up from 57% of cable subscribers in 2000. No increase in use of the website was seen among those with less education or for those above age 65. The increase in use of the Seattle Channel is seen in nearly all the demographic groups except those with lowest income, where it remained low (largely due to lack of access to cable services), and among African American respondents, those with more education and males, where it was already fairly high.

About half (55%) of the respondents say they prefer to access City services online, and 63% say that they've used the Internet to get information from some government entity in the past year. Even a quarter (27%) of those who don't have home Internet access say they prefer online access to services. Demographic differences emerged in preferred mode of communication with the City. Seniors, and those with less income or less education fell well below the 55% average preferring online access to services. Seniors tend to prefer using the telephone (31%) or writing a letter (24%), those with less education also prefer to write a letter (23%) or visit the City offices in person (19%). African Americans are less likely to select email as the preferred method to interact with government. African American users of Seattle.gov are also significantly less likely to use it to contact a city official to express an opinion (41% vs. 67%). Seniors are least likely to pay bills or fees online (11% vs. 60%).

The most important online government services indicated were paying bills, fees or taxes (26%), applying for license or permit (24%), finding maps (21%), and expressing opinions (20%).

Community involvement and civic participation

Seattleites are involved in a variety of organizations. Nearly three-fourths (71%) are involved in some type of group or organization, the great majority of which (77%) use email or a web page to communicate with their members.

Respondents are moderately positive in their assessment of the effectiveness of email and the Internet as ways to communicate opinions about issues that affect them in their community (half say it is effective or very effective). These responses are similar to those given in 2000. People with more education and younger people tend to see email and the Internet as more effective. Respondents are less positive about the use of email and the Internet as a way to communicate with elected officials (41% say it is effective or very effective), although the ratings are more positive than they were in 2000 (when 37% gave these ratings).

Business and economic development

There has been a large increase since 2000 in the percent of residents selling goods or services from home (8% to 20%, up 2 ½ times) and more people are looking online for information about local businesses. This use is up to 71% from 61% in 2000. Respondents with more education or more income, men, and people younger than 65 are more likely to look online for information about local businesses. For those younger than 36, the income differential disappears. African American respondents with less education are especially less likely to use the Internet for local business information.

Conclusions

Seattleites are technology-users. Increasingly, residents are using the Internet and cable in many aspects of their lives: personal, business, community, and civic. Even though concern about the safety and privacy of online financial transactions, computer viruses, and SPAM is high, Seattleites continue to want electronic access to information and services, as well as the opportunity to create their own content via public access television and web sites. As more services and technologies become available, Seattleites are likely to adopt them, creating a need for increasing infrastructure capacity to support emerging applications.

As many of Seattle residents are using new technologies and services, the adoption of, and comfort with these technologies continues to be highly disproportionate. There is a risk of leaving a relatively large percentage of specific groups of residents behind – seniors, those with less income or education, and to some extent, some ethnic minorities. People in these groups are adopting technology more slowly. Overcoming barriers to adoption will require consideration of a variety of factors, including cost, literacy, relevancy of content, and exposure to the opportunities provided by using specific technologies and services.

These findings identify a challenge to governments, community organizations, and businesses to explore what essential levels of technology access and literacy are, and to work to ensure equity in opportunity for all of Seattle's residents.

Seattle residents are likely to continue to be advanced consumers of technology and the services delivered by technology. The needs and opportunity exists to equalize the playing field and to enhance use of cable, computers and other technologies for economic development, community building and civic participation.